

January 20, 2011

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 Twelfth Street, S.W.
Washington, D.C. 20554
Via Electronic Filing

Re: *Ex Parte Communication*, WT Docket No. 10-4

Dear Ms. Dortch,

The DAS Forum, a membership section of PCIA—The Wireless Infrastructure Association,¹ respectfully submits the following *ex parte* communication in the above-captioned docket regarding the use of wireless signal boosters.² We urge the Commission to foster the further development of the distributed antenna system (“DAS”) industry and the benefits it provides by ensuring that DAS providers are able to continue to utilize fixed signal boosters through effective coordination with licensees. We also take the opportunity to clarify and further explain the current and effective process for receiving licensee consent.

I. DAS PROVIDES SIGNIFICANT BENEFITS TO WIRELESS USERS AND LICENSEES

As demonstrated in this docket and other proceedings, DAS provides significant benefits to wireless users and licensees.³ Inbuilding DAS installations are becoming more prevalent as a highly effective solution to improve coverage and capacity inside buildings, which is where a significant percentage of wireless use occurs. Inbuilding DAS networks can be found in hospitals, hotels, casinos, resorts, malls, commercial office buildings, sports venues, and campus buildings across the country.

¹ PCIA is a non-profit national trade association representing the wireless infrastructure industry. PCIA’s members develop, own, manage, and operate over 150,000 towers, rooftop wireless sites, and other facilities for the provision of all types of wireless and broadcast services. The DAS Forum’s membership includes virtually every major neutral host outdoor and indoor DAS provider, as well as manufacturers of equipment used in the wireless service sectors, and several commercial mobile radio service carriers currently deploying DAS as part of their networks.

² Wireless Telecommunications Bureau Seeks Comment on Petitions Regarding the use of Signal Boosters and Other Signal Amplification Techniques Used With Wireless Services, *Public Notice*, DA 10-14 (rel. Jan. 6, 2010). “Signal boosters” is used consistent with the FCC’s definition in the *Public Notice*, with a slight modification. The Commission’s definition includes “amplifiers, repeaters, boosters, distributed antenna systems, and in-building radiation systems that serve to amplify CMRS device signals, Part 90 device signals, or extend the coverage area of CMRS providers or Part 90 service licensees.” *Public Notice* at 1 n. 1. We note, however, that distributed antenna systems are networks within which signal boosters are used, and are not “signal boosters” themselves.

³ See *Ex Parte* of the DAS Forum, WT Docket 10-4, at 1-3 (filed Aug. 13, 2010); *Ex Parte* of the DAS Forum, WC Docket 07-245, at 2-5 (filed Apr. 19, 2010); Comments of NextG Networks, WC Docket 07-245, at 3-5 (filed Aug. 16, 2010).

The DAS industry is made up of several neutral host providers—infrastructure providers that build and own the DAS network used by licensees. This model has many of the positive economic characteristics of the neutral host tower industry.⁴ For example, competition and efficiency are promoted through the shared use of infrastructure. Further, as the FCC and licensees continue to look for ways to relieve the impending spectrum crunch,⁵ DAS already exists as part of the solution.⁶ The Commission must avoid unduly burdening the further deployment of DAS networks and should ensure that neutral host DAS providers are able to continue to work cooperatively with licensees.

II. DAS NETWORKS ARE EFFECTIVELY COORDINATED

Interference from improperly manufactured or installed wireless signal boosters is no doubt a serious issue. The DAS Forum continues its commitment to work with licensees to ensure that any potential interference problems caused by professionally manufactured and installed signal boosters is mitigated. We support the efforts of the Commission and wireless licensees to police and resolve interference issues.

Neutral host DAS providers work diligently and cooperatively to ensure their systems do not interfere with other elements licensees' networks. In DAS Forum member's experience, neutral host DAS providers will only retransmit or reradiate a licensee's signal after extensive coordination with the licensee. DAS providers do not have an economic incentive to reradiate or retransmit the signal of a licensee with which they have not previously coordinated.

DAS Providers Benefit From Effective Coordination

The neutral host DAS industry is similar to the neutral host tower industry in that the neutral host provider owns the physical infrastructure and maximizes its investment in that infrastructure by maximizing the number of tenants using the infrastructure.⁷ As the Commission found in its *14th Mobile Wireless Competition Report*, "tower companies independent of wireless service providers have an incentive to maximize revenues by leasing space to as many service providers as possible."⁸ On DAS networks, instead of collocating additional antennas on a tower the

⁴ The Commission has recognized that the neutral host tower industry can "increase efficiency in the [wireless] industry, ease entry, and enhance wireless service competition." *In re* Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993, WT Docket No. 09-66, *Fourteenth Report*, FCC 10-81 ¶ 291 (rel. May 20, 2010) ("14th Mobile Wireless Competition Report").

⁵ See, e.g., Prepared Remarks of Chairman Julius Genachowski, FCC, 2011 International Consumer Electronics Show (Jan. 7, 2011) ("We're in the early stages of a mobile revolution that is sparking an explosion in wireless traffic. Without action, demand for spectrum will soon outstrip supply.").

⁶ DAS networks facilitate the efficient use of spectrum because they are able to reuse a licensee's frequency band to improve coverage and capacity in a given area that is within the footprint of an existing cell site utilizing the same frequency.

⁷ See 14th Mobile Wireless Competition Report ¶ 291.

⁸ *Id.*

provider seeks to add additional licensees to the network. Because the addition of a new licensee is a revenue-generating activity, the provider will not voluntarily retransmit or reradiate the signal of a licensee with which it does not have an agreement.

For example, consider a hospitality situation such as a large hotel or casino in which a neutral host provider installs and owns an inbuilding DAS network.⁹ The hotel or casino owner will want as many licensees as possible on the system to ensure that all guests have optimal coverage and capacity on the property. Further, the DAS provider will maximize revenue for the system by maximizing the number of licensees on the system.

In this scenario, the licensee is the customer of the DAS provider, and the DAS provider will work cooperatively with the licensee to ensure that the network meets the licensee's technical needs and does not interfere with other elements of the licensee's network. In most instances, there will be a formal agreement between each licensee and the DAS provider to reradiate or retransmit the licensee's frequencies, but it may also come in the form of an informal email or some other record.

Licensee Consent is Sought Prior to Operation

As described, the prevailing practice for neutral host DAS providers is to seek the consent of the licensees whose frequencies the DAS provider intends to retransmit or reradiate. This practice has been explained herein, in various other DAS Forum filings, and by licensees such as AT&T.¹⁰

Importantly, there is little support on the record for the assertion that licensee consent is required to manufacture, sell, purchase, or install fixed signal boosters for use in DAS networks if the equipment is otherwise certified by the FCC.¹¹ Further, requiring express authorization prior to the manufacture, purchase, or installation of a fixed signal booster would increase transaction costs and slow the deployment of DAS networks and the benefits they provide.

Should the Commission seek to clarify that a spectrum license or licensee consent is required for the *operation* of a signal booster, we urge the Commission to do so in a manner that captures the existing and effective practice prevalent in the industry. When professionally manufactured fixed signal boosters are installed and operated by professional installers and operators, licensee consent can include a letter, email, or other record sent from a licensee or agent of a licensee to

⁹ Sometimes a DAS provider will simply install the DAS network and the building owner will actually own the network. The effective coordination is the same regardless of the ultimate ownership.

¹⁰ Ex Parte of AT&T, WT Docket No. 10-4, at 7 (filed May 28, 2010) ("AT&T Ex Parte") ("AT&T anticipates that DAS providers will continue to seek licensee consent prior to initiation of service as they have in the past.").

¹¹ See Petition of the DAS Forum, WT Docket 10-4, at 3-5 (filed Oct. 23, 2009); Comments of the DAS Forum, WT Docket 10-4, at 3 (filed Feb. 5, 2010); Reply Comments of the DAS Forum, WT Docket 10-4, at 3-5 (filed March 8, 2010); DAS Forum Ex Parte at 3-4. See also AT&T Ex Parte at 7 ("AT&T does not anticipate that the FCC would need to apply the presumptive authorization standards articulated [in the ex parte] to DAS providers."). It is arguable that the Commission's rules require a license or licensee consent to operate a fixed signal booster, see, e.g., 47 C.F.R. §§ 22.383, 90.219.

an operator, owner, or installer of a fixed signal booster acknowledging that the fixed signal booster will retransmit or reradiate the specified frequency bands of the licensee. Licensee consent is only sought and should only be required for the frequency bands retransmitted or reradiated.¹²

We urge the Commission to continue to recognize the benefits of DAS as an important element of the nation's wireless networks that is deployed in compliance with FCC rules and in coordination with licensees. Should the Commission take action to clarify that the rules require a spectrum license or licensee consent to operate a signal booster, we urge the Commission to do so consistent with the current practice as described herein.

Pursuant to Section 1.1206 of the Commission's rules, a copy of this letter will be filed via ECFS with your office. Please do not hesitate to contact the undersigned with any questions.

Sincerely,

_____/s/
Brian Regan
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PCIA—The Wireless Infrastructure Association
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Alexandria, VA 22314

Cc: Tom Derenge
Joyce Jones
Roger Noell

¹² While not a currently a problem, we urge the Commission to be vigilant to ensure that licensee consent does not serve as a tool for market manipulation or anticompetitive behavior. Because the success of any inbuilding neutral host DAS network is reliant on licensee coordination and consent for operation, it is possible that the opportunity may arise for a licensee to require unreasonable or unfair terms, or otherwise withhold consent.